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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,545	03/01/2004	Joseph W. Hundley		5732

7590 11/29/2007

James W. Hiney, Esq.
P.O. Box 818
Middleburg, VA 20118

EXAMINER	
TOOMER, CEPHIA D	
ART UNIT	**PAPER NUMBER**
1797	

MAIL DATE	DELIVERY MODE
11/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10790545	3/1/2004	HUNDLEY, JOSEPH W.	

James W. Hiney, Esq.
P.O. Box 818
Middleburg, VA 20118

EXAMINER	
Cephia D.. Toomer	
ART UNIT	**PAPER**
1797	20071126

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Please find attached the letter of undeliverable mail, the notice of abandonment , the office action and the PTO-892.

Cephia D. Toomer
Primary Examiner
Art Unit: 1797

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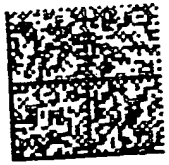

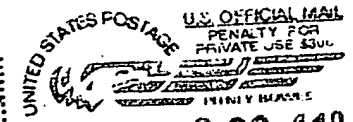

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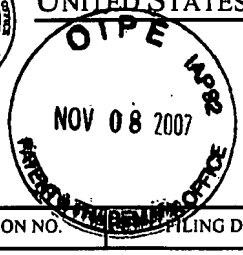

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,545	03/01/2004	Joseph W. Hundley		5732

7590 10/31/2007

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EXAMINER	
TOOMER, CEPHIA D	
ART UNIT	**PAPER NUMBER**
1797	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Abandonment	Application No.	Applicant(s)	
	10/790,545	HUNDLEY, JOSEPH W.	
	Examiner	Art Unit	
	Cephia D. Toomer	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on *05 April 2007*.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.

   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
   (d) ☒ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.

   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

Cephia D. Toomer
Primary Examiner
Art Unit: 1797

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	10/790,545	HUNDLEY, JOSEPH W.	
	Examiner	Art Unit	
	Cephia D. Toomer	1797	

All Participants:

(1) *Cephia D. Toomer*.

(2) *Mr. Hiney*.

Status of Application: _____

(3) _____.

(4) _____.

Date of Interview: *26 October 2007*

Time: _____

Type of Interview:

☒ Telephonic
☐ Video Conference
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☐ No
If Yes, provide a brief description:

Part I.

Rejection(s) discussed:

Claims discussed:

Prior art documents discussed:

Part II.

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

The examiner informed Mr. Hiney that the application is abandoned. Mr. Hiney's mailing address has changed. He will file a change of address and petition to revive.

Part III.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,545	03/01/2004	Joseph W. Hundley		5732

7590 04/05/2007

James W. Hiney, Esq.
Suite 1100
1872 Pratt Drive
Blacksburg, VA 24060

EXAMINER	
TOOMER, CEPHIA D	
ART UNIT	**PAPER NUMBER**
1714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

C

Office Action Summary	Application No.	Applicant(s)	
	10/790,545	HUNDLEY, JOSEPH W.	
	Examiner	Art Unit	
	Cephia D. Toomer	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 33 and 35 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to the claims in the alternative only. See MPEP § 608.01(n).

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 9, 11-15, 19 and 20 of copending Application No. 11/214,266. Although the conflicting claims are not identical, they are not patentably distinct from each other because the composition and methods set forth in the present invention encompasses those of the co-pending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,860,911. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositions and methods of the present invention encompass those of the patent.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In all of the claims containing proportions, it is not clear if the percentages are by volume or by weight. Clarification and correction are required.

Claim 1 is rejected because "slack wax" should read – a slack wax—and "fatty acid" should read – a fatty acid --. It is not clear if the ammonia like compounds are included in the composition because no percentage is given for that component. If those compounds are present, they should be set forth in Markush language.

In claim 2, "slack wax" should read – a slack wax – and "amide" should read – an amide --.

In claim 3, it is not clear what constitutes the composition. Applicant has inserted a period at the end of line 3. It is assumed that those components at the top of page 2 belong with claim 3. Those comments above in claim 1 regarding "slack wax", "fatty acid" and "Ammonia like compounds" apply here as well.

In claim 4, "slack wax" should read – a slack wax—; "fatty acid" should read – a fatty acid – and "Amide" should read – an amide--.

Claim 5 is rejected because there are no variations of stearic acid. The "a" appearing before "stearic acid" should be removed.

Claims 6, 9, 12, 33 and 43 are rejected because urea is not an amide.

In claim 7, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid – and in the absence of a list of compounds which meet this limitation, the language "Ammonia like compounds" is indefinite. Also, the composition must have other compounds present otherwise the composition reads on water.

In claim 8, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid –; and "Amide" should read – an amide --.

In claim 10, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid – and in the absence of a list of compounds which meet this limitation, the language "Ammonia like compounds" is indefinite. Also, the composition must have other compounds present otherwise the composition reads on water.

In claim 11, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid –; and "Amide" should read – an amide --.

Claims 13-15 and 18 are rejected because there is no antecedent support for "A reagent".

Claim 19 is rejected because the compounds having ammonia like properties should be set forth in Markush language. Also, the composition must have other components present otherwise the composition reads on water.

Claim 20 is rejected because the compounds having ammonia like properties should be set forth in Markush language. Also, the composition must have other components present otherwise the composition reads on water.

In claim 21, "Hydrocarbon wax" should read –a hydrocarbon wax --; "fatty acid" should read – a fatty acid --. Also, the composition must contain other components otherwise the composition reads on water.

Claim 22 is rejected because there is no antecedent support within the claim for "chemical change agent". Also, the claim should end with a period.

In claim 26, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid – and in the absence of a list of compounds which meet this limitation, the language "Ammonia like compounds" is indefinite. Also, the composition must have other compounds present otherwise the composition reads on water.

Claim 27 is rejected because it is not clear what constitutes "Iron oxide as well as reacted Metals". Also, it is not clear how Iron compounds differ from Iron containing compounds. Also, Iron oxide would qualify as an iron compound.

In claim 31, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid – and in the absence of a list of compounds which meet this limitation, the language "Ammonia like compounds" is indefinite. Also, the composition must have other compounds present otherwise the composition reads on water.

In claim 32, "Hydrocarbon wax" should read – a hydrocarbon wax --; "fatty acid" should read – a fatty acid –; and "Amide" should read – an amide --.

Claim 35 is rejected because there is no antecedent support for "Titanium Dioxide".

Claim 38 is rejected because there is no antecedent support for "said chemical change reagent ".

Claim 39 is rejected because the compounds having ammonia like properties should be set forth in Markush language. Also, the composition must have other components present otherwise the composition reads on water.

In claim 40, there is no antecedent support for "the ingredients". Applicant should perhaps use the same language as set forth in claim 21. Also, "Hydrocarbon wax" should read – a hydrocarbon wax" and "fatty acid" should read – a fatty acid --. Also, the composition must contain other components otherwise the composition reads on water.

In claim 41, "slack wax" should read – a slack wax--; "fatty acid" should read – a fatty acid— and "Amide" should read – an amide--.

Claim 45 is rejected because it is not clear what constitutes "Iron oxide as well as reacted Metals". Also, it is not clear how Iron compounds differ from Iron containing compounds. Also, Iron oxide would qualify as an iron compound.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 7, 10, 13, 14, 19, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Stutz (US 3,281,318).

Stutz teaches a composition comprising 25-75% by weight wax (slack wax); 0.5-10 % by weight of a fatty acid (stearic acid), 0.5-10 % by weight of alkylolamine

(ammonia like compounds) and 20-70 % by weight water (see col. 1, lines 42-48; col. 2, lines 11-20; col. 2, lines 32-33; col. 2, lines 40-48; col. 4, lines 13-15). The composition may contain 0.5-15 % by weight of a wetting agent (see col. 4, lines 16-22, 46-50). Example 9 contains all of the claimed ingredients (see col. 7, lines 32-70). It should be noted that Applicant's preamble has been given no patentable because intended use is not read as a patentable limitation.

Accordingly, Stutz teaching all the material limitations of the claims anticipates the claims.

10. Claims 7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Groszek (US 4,183,757).

Groszek teaches a composition comprising 15-75% wax and water (see abstract). It should be noted that Applicant's preamble has been given no patentable because intended use is not read as a patentable limitation.

Accordingly, Groszek teaching all the material limitations of the claims anticipates the claims.

11. Claims 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Franke (US 4,741,278).

Franke teaches a solid carbonaceous fuel containing 0.1 to 5 wt % of iron oxide (see abstract). Franke teaches that the fuel has a reduced tendency to form NO_x on combustion (see col. 1, lines 55-57). The additive is present in the fuel in a finely

divided or finely dispersed form (see col. 2, lines 31-33). The coal may be coal dust (see col. 2, lines 21-23).

Accordingly, Franke teaching all of the limitations of the claims anticipates the claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 22, 25, 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franke (US 4,741,278).

Franke has been discussed above. Franke fails to teach that the coal and NO_x reduction agent are ground together. However, no unobviousness is seen in this difference because it is well settled that combining two step into one does not avoid obviousness where the processes are substantially identical or equivalent in function, manner and results. *General Foods Corp. v. Perk Foods Co.* (DC NIII 1968) (157 USPQ 14); *Malignani v. Germania Electric Lamp Co.*, 169 F. 299, 301 (D.N.J. 1909); *Matrix Contrast Corp. v. George Kellar*, 34 F.2d 510, 512, 2 USPQ 400, 402-403 (E.D.N.Y 1929); *Hammerschlag Mfg. Co. v. Bancroft*, 32 F. 585, 589 (N.D.III.1887); *Procter & Gamble Mfg. Co. v. Refining*, 135 F.2d 900, 909, 57 USPQ 505, 513-514 (4th

Cir. 1943); *Matherson-Selig Co. v. Carl Gorr Color Gard, Inc.*, 154 USPQ 265, 276 (N.D.Ill.1967).

Franke also fails to teach that the coal is bituminous coal. However, no unobviousness is seen in this difference because the general teaching of coal encompasses bituminous coal, in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cephia D. Toomer
Primary Examiner
Art Unit 1714

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